

WHAT IS CLAIMED IS:

1. A process of producing a molded article from a composition comprising a syndiotactic vinyl aromatic polymer, comprising:

5 a) molding the composition comprising a syndiotactic vinyl aromatic polymer, wherein the syndiotactic vinyl aromatic polymer has a residual vinyl aromatic monomer content of less than 0.3 parts per 100 parts syndiotactic vinyl aromatic polymer, at a temperature of from 265°C to 305°C to produce a molded article;

10 b) heat treating the molded article at a temperature of 210°C to 230°C for at least 2 minutes to thermally initiate free radical polymerization of the residual monomer such that the molded article has a residual vinyl aromatic monomer content of less than 0.05 per 100 parts syndiotactic vinyl aromatic polymer.

2. The process of Claim 1 wherein the residual vinyl aromatic monomer content of the syndiotactic vinyl aromatic polymer is less than 500 ppm based on the total weight of
15 the syndiotactic vinyl aromatic polymer.

3. The process of Claim 1, wherein the syndiotactic vinyl aromatic polymer is syndiotactic polystyrene.

4. The process of Claim 1, wherein the composition of the syndiotactic vinyl aromatic polymer additionally comprises glass filler.

20 5. The process of Claim 1, wherein the composition comprises:
22 to 100 weight percent syndiotactic styrene homopolymer having less than 500 ppm residual monomer content,
0 to 1 weight percent heat stabilizer,
0 to 2 weight percent crystallization nucleator,
25 0 to 5 weight percent lubricant,
0 to 20 weight percent impact modifier,
0 to 45 weight percent glass filler, and
0 to 10 weight percent compatibilizer,

wherein all weight percents are based on the total weight of the composition.

30 6. An article produced by the process of Claim 1.

7. An article produced by the process of Claim 4.

8. The article of Claim 7 which is an article useful for food applications.